



**XVII ICC**  
ISTANBUL 2022  
25 -29 JULY



## ICC 2022 DETAILED PROGRAM

**26 July 2022, Tuesday**

### TS19 + TS29 High temperature bentonite barriers

**Convener:** *Leupin, O., Olin, M., Dohrmann, R., Sellin, P., Svensson, D., Nguyen-Thanh, L.*

- 14:45**     **PHY-1034-Adsorption of hydrogen gas on clay minerals under conditions relevant for underground nuclear waste repositories**  
*Paweł P. Ziemiański, Arkadiusz Derkowski*
- 15:00**     **PHY-1147-Impact of temperature on mechanical and geochemical behaviour of swelling clay minerals**  
*Roy Chaaya, Stéphane Gaboreau, Hugues Raimbourg, Joachim Tremosa*
- 15:15**     **PHY-1110-Natural evidence for the cementation in bentonite buffer based on transmission electron microscopy observation of bentonite ores**  
*Ryosuke Kikuchi, Misato Horiuchi, Masaki Saito, Tobimaru Ishiwata, Yuto Nishiki, Tsutomu Sato, Yusuke Takayama, Seiichiro Mitsui*
- 15:30**     **PHY-1411-Microwave Leaching of Aluminum from Kaolin by HCL**  
*Mohammad Al-Harashsheh, Naser Abo Olaem, Omar Tahat*
- 15:30**     **PHY-1413-A combined SEM and pH study of the corrosion of metal iron in contact with bentonite**  
*Kaufhold, S.a, Dohrmann, R.a,b, Weber, Ch.a*

**29 July 2022, Friday**

### TS19 + TS29 High temperature bentonite barriers

**Convener:** *Leupin, O., Olin, M., Dohrmann, R., Sellin, P., Svensson, D., Nguyen-Thanh, L.*

- 13:00**     **PHY -1021-Stability of smectite at 200°C: How KCl, K-acetate and K-oxalate influences the formation of 10 Å-layers**  
*Julia Schlosser, Georg H. Grathoff, Stephan Kaufhold, Jan Dietel, Anja Schleicher, Laurence N. Warr*
- 13:15**     **PHY -1092-Increased temperature effects on Na Wyoming bentonite: Significance for deep geological radioactive waste disposal**  
*Gianni F. Vettese, Noora Pakkanen & Marja Siitari-Kauppi*
- 13:30**     **PHY -1190-Mineralogy and geochemistry of a heated bentonite pellets column**  
*M.V. Villar, J. Cuevas, A. Ortega, A.M. Melón, A.B. Zabala, R.J. Iglesias, C. Gutiérrez-Álvarez*
- 13:45**     **PHY -1232-Cation exchange processes in bentonite buffer material test (ABM-5), after heating to 250 °C**  
*Dohrmann Reiner, Gröger-Trampe Jens, Kaufhold Stephan*
- 14:00**     **VRT -1367-Characterization of Bentonites from the in situ ABM5 Heater Experiment at Äspö Hard Rock Laboratory, Sweden**  
*Ana María Fernández, José F. Marco, Paula Nieto, Fco. Javier León, Luz María Robredo, M. Angeles Clavero, Ana Cardona, Sergio Fernández, Daniel Svensson, Patrik Sellin*